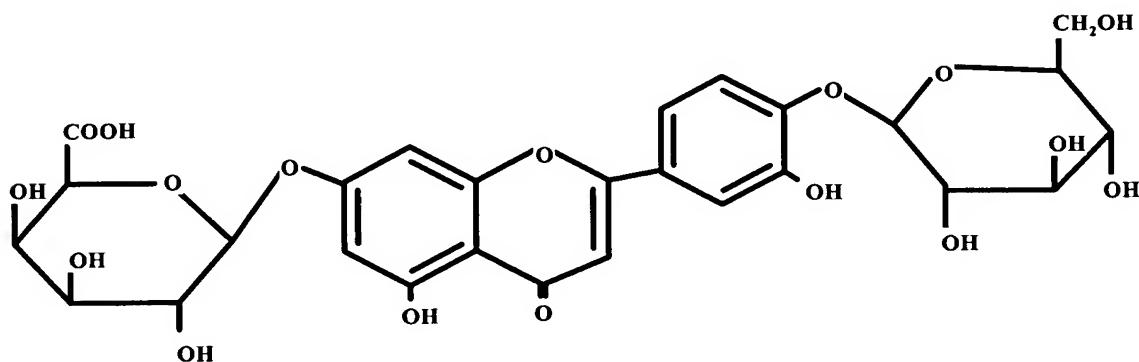


Claims:

1. A composition for enhancing bioavailability of drugs / nutraceuticals, said composition comprising an active drug / nutraceutical and an effective amount of bioenhancer selected from a fraction obtained from *Cuminum cuminum* having characteristics as shown in figure 3 and an active molecule of formula 1 to enhance pharmaceutical effect of said active drug / nutraceutical without any harmful side effect.



3',5-Dihydroxy flavone 7-O- β -D-galacturonide-4'-O- β -D-glucopyranoside

Fig-1

2. A composition as claimed in claim 1, wherein w/w ratio of the bioenhancer to the drug / nutraceutical is in the range of 0.1 to 300.
3. A composition as claimed in claim 1, wherein said bioenhancer increases bioavailability of the drug / nutraceutical by 80-220%.
4. A composition as claimed in claim 1, wherein said active drug is selected from the group comprising of antibiotics, anti-fungal drugs, antiviral drugs, anticancer drugs, cardiovascular disorder drugs, CNS disorders drugs, antiinflammatory / antiarthritic

drugs, anti-TB / anti-leprosy drugs, anti-histamines / respiratory disorder drugs, corticosteroids, immuno-suppressants and anti ulcer drugs.

5. A composition as claimed in claim 4, wherein said antibiotic is selected from the group comprising of fluroquinolones, macrolides, cephalosporins, penicillins and aminoglycosides.
6. A composition as claimed in claim 5, wherein said fluroquinolone is selected from the group comprising of ciprofloxacin, p-floxacin, o-floxacin and norfloxacin.
7. A composition as claimed in claim 5, wherein said macrolide is selected from the group comprising of erythromycin, roxythromycin and azithromycin.
8. A composition as claimed in claim 5, wherein said cephalosporin is selected from the group comprising of cefalexin, cefadroxil and cefatrioxone.
9. A composition as claimed in claim 5, wherein said penicillin is selected from the group comprising of amoxycillin and cloxacillin.
10. A composition as claimed in claim 5, wherein said aminoglycoside used is amikacin.
11. A composition as claimed in claim 4, wherein said antifungal drug is selected from the group comprising of fluconazole, amphotericin B and ketoconazole.
12. A composition as claimed in claim 4, wherein said antiviral drug is selected from the group comprising of acyclovir and zidovudine.
13. A composition as claimed in claim 4, wherein said CNS drug is selected from the group comprising of alprazolam and haloperidol.
14. A composition as claimed in claim 4, wherein said anti-cancer drug is selected from the group comprising of methotrexate, 5-fluorouracil, doxorubicin and cisplatin.

15. A composition as claimed in claim 4, wherein said cardiovascular disorder drug is selected from the group comprising of amlodipine, atenolol and propranolol.
16. A composition as claimed in claim 4, wherein said anti-inflammatory / antiarthritic drug is selected from the group comprising of diclofenac, piroxicam, nimesulide and rofecoxib.
17. A composition as claimed in claim 4, wherein said anti-TB / antileprosy drug is selected from the group comprising of rifampicin, dapsone, ethionamide and cycloserine.
18. A composition as claimed in claim 4, wherein said anti-histamines / respiratory disorder drug is selected from the group comprising of salbutamol, theophylline and loratadine.
19. A composition as claimed in claim 4, wherein said corticosteroid is selected from the group comprising of prednisolone, dexamethasone and betamethasone.
20. A composition as claimed in claim 4, wherein said immunosuppressant is selected from the group comprising of cyclosporin A and tacrolimus.
21. A composition as claimed in claim 4, wherein said anti-ulcer drug is selected from the group comprising of ranitidine, cimetidine and omeprazole.
22. A composition as claimed in claim 1, wherein nutraceutical is selected from the group comprising of vitamins, antioxidants, natural herbal products, herbal formulations and essential nutritional components.
23. A composition as claimed in claim 22, wherein said vitamin is selected from the group comprising of Vitamin A, E, B1, B6, B12, C and Folic acid.

24. A composition as claimed in claim 22, wherein said antioxidant is selected from the group comprising of β -carotene, silymarin, selenium, lycopene and ellagiogallotannins.
25. A composition as claimed in claim 22, wherein said natural herbal product is selected from the group comprising of curcumin, boswellic acids and rutin.
26. A composition as claimed in claim 22, wherein herbal formulation is selected from the group comprising of echinacea, tinospora cordifolia, picrorrhiza kurroa, emblica ribes, asparagus racemosus, terminalia chebula and centella asiatica.
27. A composition as claimed in claim 22, wherein said nutritional component is selected from the group comprising of methionine, lysine, leucine, valine, isoleucine, zinc, calcium, glucose, potassium, copper and iron.
28. A composition as claimed in claim 1, wherein said composition is administered orally or intramuscularly and is also relevant to animal health.
29. A method for enhancing bioavailability of drugs / nutraceuticals said method comprising of admixing to the drug / nutraceutical an effective amount of bioenhancer selected from a fraction obtained from *Cuminum cyminum* having characteristics as shown in figure 3 and an active molecule of formula 1 to enhance pharmaceutical effect of said active drug / nutraceutical without any harmful side effect.
30. A method as claimed in claim 29, wherein the bioavailability of the antibiotic is enhanced by 45 to 85% when the same is mixed with the active molecule of formula 1.
31. A method as claimed in claim 29, wherein the bioavailability of the antibiotic is enhanced by 55 to 137% when the same is mixed with the fraction.

32. A method as claimed in claim 29, wherein the bioavailability of the antifungal drug is enhanced by 77 to 110% when the same is mixed with the active molecule of formula 1.

33. A method as claimed in claim 29, wherein the bioavailability of the antifungal drug is enhanced by 85 to 105% when the same is mixed with the fraction.

34. A method as claimed in claim 29, wherein the bioavailability of the antiviral drug is enhanced by 89 to 120% when the same is mixed with the active molecule of formula 1.

35. A method as claimed in claim 29, wherein the bioavailability of the antiviral drug is enhanced by 120 to 135% when the same is mixed with the fraction.

36. A method as claimed in claim 29, wherein the bioavailability of the CNS drug is enhanced by 70 to 72% when the same is mixed with the active molecule of formula 1.

37. A method as claimed in claim 29, wherein the bioavailability of the CNS drug is enhanced by 60 to 75% when the same is mixed with the fraction.

38. A method as claimed in claim 29, wherein the bioavailability of the anti-cancer drug is enhanced by 65 to 110% when the same is mixed with the active molecule of formula 1.

39. A method as claimed in claim 29, wherein the bioavailability of the anti-cancer drug is enhanced by 90 to 240% when the same is mixed with the fraction.

40. A method as claimed in claim 29, wherein the bioavailability of the cardiovascular disorder drug is enhanced by 75 to 85% when the same is mixed with the active molecule of formula 1.

41. A method as claimed in claim 29, wherein the bioavailability of the cardiovascular disorder drug is enhanced by 110 to 140% when the same is mixed with the fraction.
42. A method as claimed in claim 29, wherein the bioavailability of the anti-inflammatory / antiarthritic drug is enhanced by of 43 to 105% when the same is mixed with the active molecule of formula 1.
43. A method as claimed in claim 29, wherein the bioavailability of the anti-inflammatory / antiarthritic drug is enhanced by 70 to 125% when the same is mixed with the fraction.
44. A method as claimed in claim 29, wherein the bioavailability of the anti-TB / antileprosy drug is enhanced by of 67 to 120% when the same is mixed with the active molecule of formula 1.
45. A method as claimed in claim 29, wherein the bioavailability of anti-TB / antileprosy drug is enhanced by 93 to 170% when the same is mixed with the fraction.
46. A method as claimed in claim 29, wherein the bioavailability of the anti-histamines / respiratory disorder drug is enhanced by of 62 to 98% when the same is mixed with the active molecule of formula 1.
47. A method as claimed in claim 29, wherein the bioavailability of anti-histamines / respiratory disorder drug is enhanced by 35 to 95% when the same is mixed with the fraction.
48. A method as claimed in claim 29, wherein the bioavailability of corticosteroids is enhanced by of 46 to 67% when the same is mixed with the active molecule of formula 1.
49. A method as claimed in claim 29, wherein the bioavailability of corticosteroids is enhanced by 50 to 60% when the same is mixed with the fraction.

50. A method as claimed in claim 29, wherein the bioavailability of immunosuppressants is enhanced by of 90 to 135% when the same is mixed with the active molecule of formula 1.
51. A method as claimed in claim 29, wherein the bioavailability of immunosuppressants is enhanced by 110 to 170% when the same is mixed with the fraction.
52. A method as claimed in claim 29, wherein the bioavailability of anti-ulcer drugs is enhanced by 72 to 85% when the same is mixed with the active molecule of formula 1.
53. A method as claimed in claim 29, wherein the bioavailability of anti-ulcer drugs is enhanced by 70 to 95% when the same is mixed with the fraction.
54. A method as claimed in claim 29, wherein the bioavailability of herbal formulation is enhanced by 45 to 102% when the same is mixed with the active molecule of formula
55. A method as claimed in claim 29, wherein the bioavailability of herbal formulation is enhanced by 35 to 147% when the same is mixed with the fraction.
56. A method as claimed in claim 29, wherein said method is administered orally or intramuscularly and is also relevant to animal health.